



Bal Bharati
PUBLIC SCHOOL

Sector-21, Noida, G.B. Nagar

PHYSICAL FITNESS PROTOCOLS AND GUIDELINES FOR 5-18 YEARS



Goals

GOALS FOR ACTIVE LIFE STYLE



OVERVIEW

Fitness defines the ability of an individual to perform physical activity. The Fitness Program for children focuses on improving the cardiorespiratory fitness, building strong bones and muscles, managing optimum weight, reducing symptoms of anxiety and depression.

Successful participation in specific physical activities requires the acquisition and mastery of appropriate fundamental and specialised skills

1. Purpose of the Program

The purpose of initiating the fitness programme is to enable the children to demonstrate individually and in groups, the physical skills, practices and values to enjoy an active healthy lifespan.

2. Key Objectives

1. Ensure 60 Minutes of Moderate-to-vigorous Physical Activity (MVPA) Per Day
2. Promote 'Fitness for All'
3. Institution of Age-appropriate, Progressive Curriculum:
 - a. Children of Class Nursery to III to perform variety of fundamental movement skills
 - b. All Children from Class VI onwards to get intervention aimed at improving their fitness levels, competency in sports skills and techniques of children
 - c. Age-appropriate Physical Activities and Exercises to include flavours of
 - i. Recreational Games
 - ii. Modern Sports and Traditional Games
 - iii. Dance
 - iv. Yoga
 - v. Free-hand exercises

4. Fitness Assessment Report Card for every Child (Class 1-12):

- a. Physical Fitness Assessments will be conducted by School for each student by Trained Staff to track the fitness level and health indicator of each child as per the **Khelo India battery of tests for Class 1-3 (5-8 years) and Class 4-12 (9 to 18+ years)**.
- b. Informal Assessment of children by their parents and collation of data compiled through Physical fitness Assessments

5. Create a System for Monitoring: Tracking the overall improvements of the school as well as each class and child through digitization of records.

6. Develop system for regular feedback and program re-evaluation strategy: Based on the reports and records Re-evaluate and implement Intervention Strategy

Fitness encompasses a wide range of abilities and is generally divided into specific fitness categories or components, each can be tested and trained individually. Every activity and sport requires a specific set of skills and fitness level.

1. Health-related Physical Fitness Components:

- a. Cardiorespiratory endurance,
- b. body composition,
- c. muscular strength,
- d. muscular endurance
- e. flexibility.

2. Skill-related Physical Fitness Components:

- a. Speed
- b. Agility
- c. Coordination
- d. Balance
- e. Power
- f. Reaction time

The concept of Health Related Physical Fitness Components can be incorporated in schools as Developmental Goals. Schools may like to conduct assessment independently/ tracking of improvement on these parameters for the overall development of children.



PHYSICAL FITNESS ASSESSMENT

The Khelo India battery of Fitness Assessment Tests has been finalized by the Expert Committee of Physical Fitness Assessment:

2.1 Battery of Tests for Age Group 5-8 Years | Classes 1 To 3

For primary classes 1-3, children should acquire Fundamental Movement Skills (FMS) leaving the learning of specific physical activities for the later . FMS provides the building blocks for many physical activities, such as playing games, dance, and sport.

Locomotor, Manipulative & Body Management abilities are key to success in most sports and physical activities.

Along with Body Composition (BMI) following are the abilities of children in classes 1-3 which need to be measured and tracked and are important for controlling the body in various situations:

1. Coordination (Plate Tapping)
2. Balance (Flamingo Balance)

2.2 Battery of Tests for Age Group: 9-18+ Years | Class 4 To 12

For Class 4 to 12, it is important for Children to have an overall physical fitness. The following Components are to be considered in Physical Health and Fitness Profile:

1. Body Composition (BMI)
2. Muscular Strength and Endurance
 - a. Abdominal/Core Strength (Partial Curl-up)
 - b. Muscular Endurance (Push Ups for Boys, Modified Push Ups for Girls)
3. Flexibility (Sit and Reach Test)
4. Cardiovascular Endurance (600 M Running/Walking)
5. Speed (50 m Dash)

The tests will be done by schools across India through the **Khelo India Assessor App (School Version)** - **available on Google Play Store**. Children will be given a Fitness Assessment Report Card at the end of Term 1 and Term 2.

Schools and Parents will have individual User ID and Password, with access to schoolfitness.kheloindia.gov.in and Khelo India App respectively where they will be able to monitor the progress of their wards and see the detailed Report Cards and previous history.

3.1 BODY COMPOSITION (BODY MASS INDEX OR BMI)

What does it measure:

Body Composition refers primarily to the distribution of muscle and fat in the body. Body size such as height, length and girth are also grouped under this component.

The test performed is Body Mass Index (BMI), which is calculated from Body Weight (W) and height(H).

$BMI = W / (H \times H)$, where W = body weight in kilograms and H= height in meters.

High BMI usually indicates higher levels of body fat.

Infrastructure/Equipment Required:

Flat, Clean surface, Weighing Machine, Stadiometer/Measuring Tape pasted on a wall.



Height may be recorded in centimetre accurately to the nearest 0.1 centimeter.

Measuring Height Accurately

Make the students take off their shoes, bulky clothing and hair ornaments that interfere with the measurement of height

Take the height measurement on flooring that is not carpeted and against a flat surface such as a wall with no moulding.

Have the participant stand with feet together and back against the wall. Make sure legs are straight, arms are by the side and shoulders are level.

Make sure the participant is looking straight ahead and that the line of sight is parallel with the floor.

Take the measurement while the participant stands with head, shoulders, buttocks, and heels touching the flat surface (wall). (See illustration.) Depending on the overall body shape of the participant, all points may not touch the wall.

Use a flat headpiece to form a right angle with the wall and lower the headpiece until it firmly touches the crown of the head.

Make sure the measurer's eyes are at the same level as the headpiece.

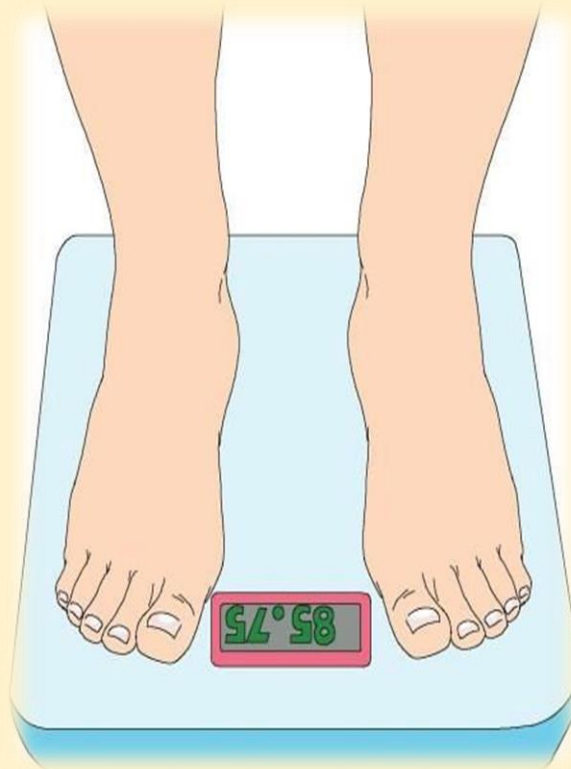
Measuring Weight Accurately

Use a digital scale. Avoid using bathroom scales that are spring-loaded. Place the scale on firm flooring (such as tile or wood) rather than carpet.

Have the participant remove shoes and heavy clothing, such as sweaters.

Have the participant stand with both feet in the centre of the scale.

Record the weight to the nearest decimal in kilograms (for example, 25.1 kilograms).



3.2 COORDINATION (PLATE TAPPING TEST)

What does it measure:

Tests speed and coordination of limb movement

Infrastructure/Equipment Required:

Table (adjustable height), 2 yellow discs (20cm diameter), rectangle (30 x 20 cm), stopwatch

Scoring:

The time taken to complete 25 cycles is recorded



How to perform

If possible, the table height should be adjusted so that the student is standing comfortably in front of the discs. The two yellow discs are placed with their centers 60 cm apart on the table. The rectangle is placed equidistant between both discs.

The non-preferred hand is placed on the rectangle. The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible.

This action is repeated for 25 full cycles (50 taps).

3.3 STATIC BALANCE (FLAMINGO BALANCE TEST)

Infrastructure/Equipment Required:

Non Slippery even surface, Stopwatch, can be done by just standing on a beam.

Scoring:

The total number of falls or loss of balance in 60 seconds of balancing is recorded.

If there are more than 15 falls in the first 30 seconds, the test is terminated.



How to conduct: <https://youtu.be/LN72M7lj6tg>

How to perform

Stand on the beam. Keep balance by holding the instructor's hand (if required to start).

While balancing on the preferred leg, the free leg is flexed at the knee and the foot of this leg held close to the buttocks.

Start the watch as the instructor lets go of the participant/subject.

Pause the stopwatch each time the subject loses balance (either by falling off the beam or letting go of the foot being held).

Resume over, again timing until they lose balance. Count the number of falls in 60 seconds of balancing.

If there are more than 15 falls in the first 30 seconds, the test is terminated.

What does it measure:

Ability to balance successfully on a single leg. This single leg balance test assesses the strength of the leg, pelvic area, trunk muscles as well as static balance.

3.4 ABDOMINAL/CORE STRENGTH (PARTIAL CURL UP - 30 SECONDS)

What does it measure:

The curl up test measures abdominal muscular strength and endurance of the abdominals and hip-Flexors, important in back support and core stability.

Infrastructure/Equipment Required:

Flat clean cushioned surface with two parallel strips (6 inches apart), Stopwatch

Scoring:

Record the maximum number of Curl ups in a certain time period 30 seconds.



Administrative Suggestion:

Participants should be encouraged to keep normal breathing rate. Results are usually better if the participant can maintain constant pace during the activity.

How to perform

The subject lies on a cushioned, flat, clean surface with knees flexed, usually at 90 degrees, with hands straight on the sides (palms facing downwards) closer to the ground, parallel to the body.

The subject raises the trunk in a smooth motion, keeping the arms in position, curling up the desired amount (at least 6 inches above/along the ground towards the parallel strip).

The trunk is lowered back to the floor so that the shoulder blades or upper back touch the floor.

Suggested physical activities to improve abdominal strength (partial curl ups) and muscular endurance (push ups/ modified push ups for girls)

1. Practice climbing stairs, walking uphill, cycling, dancing, push ups, sit ups, squats, planks, crunches Quarter squat, Climb stairs, Crunches and Back extension exercise etc. to build strength.
2. Students must practice Naukasana, Shalabhasana, Akarna Dhanurasana Tadasana, Vrikshasana, Utkatasana, Trikonasana, Katichakrasana, Yoga Mudrasana,

3.5 MUSCULAR ENDURANCE (PUSH UPS FOR BOYS/MODIFIED PUSH UPS FOR GIRLS)

What does it measure:

Upper body strength, endurance, and trunk stability.

Infrastructure/Equipment Required:

Flat clean cushioned surface/Gym mat

Scoring:

Record number of correctly completed push ups.



How to perform

A standard push up begins with the hands and toes touching the floor, the body and legs in a straight line, feet slightly apart, the arms at shoulder width apart, extended and at a right angle to the body.

Keeping the back and knees straight, the subject lowers the body to a predetermined point, to touch some other object, or until there is a 90-degree angle at the elbows, then returns back to the starting position with the arms extended.

This action is repeated, and the test continues until exhaustion, or until they can do no more in rhythm or have reached the target number of push-ups.

For girls: push-up technique is with the knees resting on the ground.

Administrative Suggestion:

Participants should be encouraged to keep their back straight. Results are usually better if the participant can maintain constant pace during the activity.

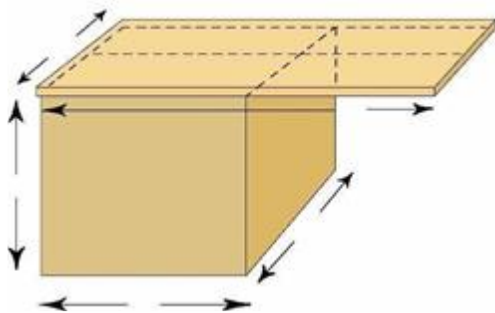
2.6 FLEXIBILITY (SIT AND REACH)

What does it measure:

Common measure of flexibility and specifically measures the flexibility of the lower back and hamstring muscles. This test is important as it indicates tightness in the lower back area commonly known as lower back pain

Infrastructure/Equipment Required:

Flat clean cushioned surface/Gym Mats, Sit and Reach box with the following dimensions: 12" x 12" (sides) 12" x 10" (front and back) 12" x 21" (top) Inscribe the top panel with centimeter/mm gradations.



Scoring:

The score is recorded (difference between initial position and final position) in cm and mm, as the distance reached by the hand.



Administrative Suggestion:

How to perform

This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet are placed flat against the Sit and Reach box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down.

With the palms facing downwards, and the hands on top of each other, the subject reaches forward along the measuring line as far as possible.

Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for one-two seconds while the distance is recorded. Make sure there are no jerky movements.

It is crucial that the vertical plane against which the subject's feet will be placed is exactly at the 23 cm mark of the Sit and Reach box.

3.7 CARDIOVASCULAR ENDURANCE (600 M RUN/WALK)

What does it measure:

Cardiovascular Fitness/Cardiovascular Endurance

Infrastructure/Equipment Required:

Stopwatch, whistle, marker cone, lime powder, measuring tape, 200 or 400 m with minimum 1 m width preferably on a flat and even playground with marking of starting and finish line.

Scoring:

Time taken for completion (Run or Walk) in min, sec

How to perform

Participants are instructed to run 600 m at the fastest possible pace.

The participants begin on signal (Starting point)- "ready, start". As they cross the finish line, elapsed time should be announced to the participants.

Walking is permitted but the objective is to cover the distance in the shortest possible time.

Administrative Suggestion:

Participants should be encouraged to practice running with emphasis placed on the concept of pace. Results are usually better if the participant can maintain constant pace during most of the run and perhaps using a strong closing effort.

Suggested physical activities to improve cardiovascular endurance (600 m run/walk): Students must perform pranayam (kapalbhati, bhastrika, bhramari), cycling, swimming, aerobics, running and dancing to improve endurance.

3.8 SPEED (50 M DASH)

What does it measure:

Determines acceleration and speed

Infrastructure/Equipment Required:

Measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 60 m.

Scoring:

Time taken for completion

How to conduct: https://youtu.be/V7SHY_n7n2A

How to perform

A thorough warm up should be given, including some practice starts and accelerations.

Start from a stationary position, with one foot in front of the other. The front foot must be on or behind the starting line. This starting position should be static (dead start).

The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and encourage to continue running hard through the finish line.

Administrative Suggestion:

Participants should be encouraged to practice running with emphasis placed on the concept of pace. Results are usually better if the participant can maintain constant pace during most of the run and perhaps using a strong closing effort.

Suggested physical activities to improve speed (50-m standing dash):

Students can practice quick sprints, frog hops and one leg hops to improve speed. They can also do leg stretching to increase stride length which in turn improves speed.

Additionally, you can practice 10m shuttle run, zigzag run, agility hurdles, Two Jumps Forward, One Jump Back, Squat Out / Hop In, Lateral Jumps with Agility Ladder, criss cross rope jumping to improve speed along with change in direction (agility).



FITNESS PROTOCOLS

ACTIVITIES FOR AGE 5-8 YRS (CLASS 1-3) - FOCUS ON FUNDAMENTAL MOVEMENT SKILLS

The focus is on the development of key Fundamental Movement Skills which are required for life. Fit India recommends the following activities for improvement of fitness for the 5-8 age groups:

1. Locomotor Skills

- a. Walking
- b. Running
- c. Leaping / Jumping
- d. Hopping / Skipping / Galloping
- e. Sliding / Crawling / Rolling/rotating

2. Manipulative Skills

- a. Throwing
- b. Catching
- c. Bouncing / Dribbling
- d. Trapping
- e. Kicking with Hand / with leg
- f. Volleying
- g. Striking etc.

3. Body Management/Non-locomotor Skills

- a. Curling
- b. Stretching
- c. Twisting / turning / spinning
- d. Pushing / Pulling
- e. Rocking
- f. Swinging / pivoting
- g. Balancing / counter balancing
- h. Counter-tension etc.)

The four broad categories of movement concepts are taught:

BODY AWARENESS	SPACE AWARENESS	EFFORT AWARENESS	RELATIONSHIP AWARENESS
What the body is doing	Where the body and object is moving	How the body is moving	With whom or what the body is relating to as it moves

These skills taught in Class 1-3 are fundamental to learning any sports, physical, recreational, dance related activities. All activities are fun and inclusive. Activities range from Athletics, Education Gymnastics, Recreational and Minor/Adapted Games, Traditional Game forms, Health and Nutrition, Dance etc.

Activities which are recommended for improvement of FMS:

Activity 1: Walking on Heels

Having good balance is important for many everyday activities, such as going up and down the stairs.

How to Perform:

1. Position the heel of one foot just in front of the toes of the other foot. Your heel and toes should touch or almost touch.
2. Choose a spot ahead of you and focus on it to keep you steady as you walk.
3. Take a step. Put your heel just in front of the toe of your other foot.
4. Repeat for 20 steps



Activity 2: Crouch Forward & Backward

How to Perform:

1. Get down into a crouching position.
2. Simply walk forward as far as you can, maintaining the crouch position.
3. Shoot for 30 seconds continuously and complete 3 sets
4. Repeat the same now in a backward position, i.e. try going back in the same crouching position.



Activity 3: Running & Jumping

How to Perform:

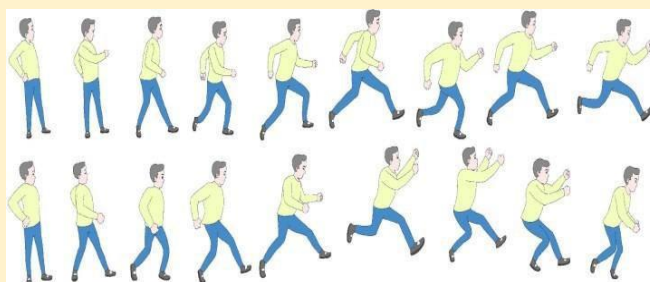
1. Run Forwards (1) /Backwards(2)
2. Run Sideways (3)
3. Jump with both feet
4. Jump from one foot to another

Variations:

1. Run on the spot slowly and quickly
2. Jump or move from one spot to another

Equipment:

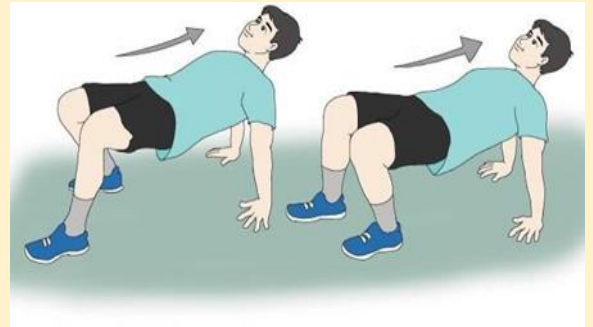
1. Lime Powder
2. Cones & Markers



Activity 4: Animal Walk

Crab Walk

1. Begin by sitting on the floor with your feet hip-distance apart in front of you and your arms behind your back with palms facing the ground and fingers facing hips.
2. Lift hips off the floor and tighten your abs.
3. Start “walking” forward by moving your left hand followed by your right foot; and then your right hand followed by your left foot. Walk four or more steps as space allows, then walk back.
4. Continue back and forth for the desired amount of time.



Bear Walk

1. Place your hands on the ground about 3 feet in front of you.
2. Keep your buttocks high in the air.
3. Step forward with one of your hands. Then step forward with the opposite foot. Step forward with the other arm and then the other foot.
4. Continue forward in the manner.
5. When you get to the end of the room you can either go backward or turn around and go the direction.



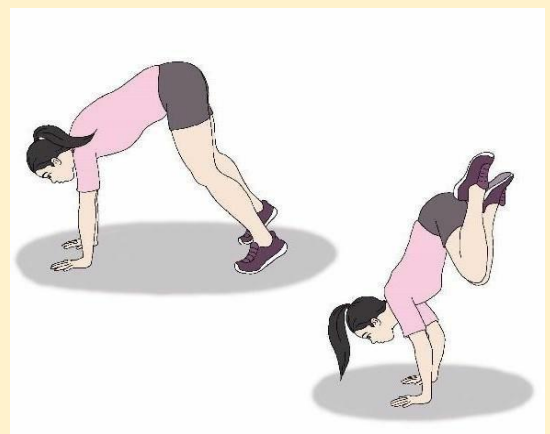
Snake Crawl

1. Go flat on your stomach.
2. As you crawl, rotate your knees out so your hips can hug the ground as close as possible.
3. Push the insides of your feet into the ground.



Donkey Kick

1. Get on all fours, with your hands stacked directly under shoulders, and knees under hips.
2. Make sure your back is flat (imagine you are balancing a cup of coffee on your lower back), and tuck your chin slightly so that the back of your neck is facing the ceiling.
3. Without rounding your spine, engage your lower abdominals. Keeping the 90-degree bend in your right knee, slowly lift your leg straight back and up towards the ceiling.
4. Your max height is right before your back starts to arch, or your hips begin to rotate.
5. Return to the starting position. Repeat all steps on one side, then switch legs.



Activity 5 : Static Balance: Standing like a Stork

1. Stand on one foot behind a sturdy chair, holding on for balance.
2. Hold the position for up to 10 seconds.
3. Repeat 10-15 times.
4. Repeat 10-15 times with another leg.
5. Repeat 10-15 more times with each leg.



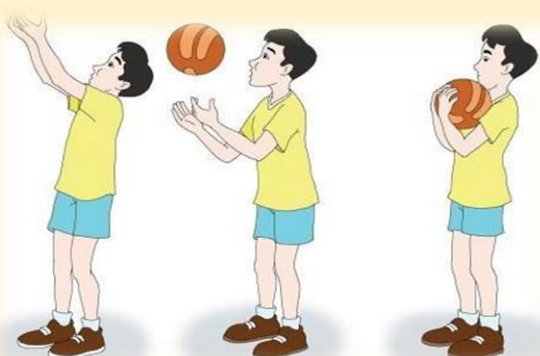
At the beginning you can hold the chair or wall for support. As you progress try the balance activity without any support.

Activity 6 : Skipping

1. Hold the skipping rope in front of you with your hands together and your elbows close to your body.
2. Practice a toe catch.
3. Place the rope behind you and turn the jump rope over your head.
4. Catch the jump rope under your toes and lift up your heels and let it out from underneath your feet.



Activity 7 : Throwing and Catching



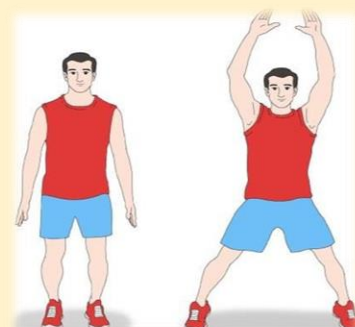
In the above activities there is a thrower who throws the ball towards the other person who is the catcher. This activity can be done between two or more persons.

Activity 8 : Zigzag Running

1. Place 5 cones in a zigzag pattern 3-5 feet apart.
2. Run quickly all the way around each cone and run diagonally to the next cone in 1 step.
3. Always go to the OUTSIDE of the cones and run all the way around.
4. Perform the drill down and walk back, then repeat for your second set. After 2 sets you'll take a 30 second break, then repeat for a total of 3 sets.

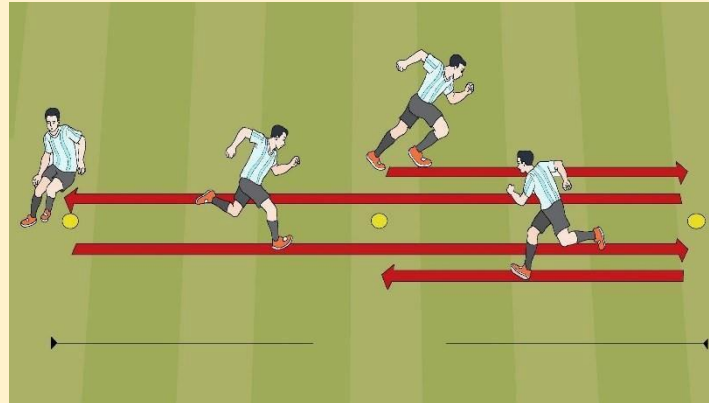
Activity 9 : Jumping Jacks

1. Stand upright with your legs together, arms by your side.
2. Bend your knees slightly, and jump into the air
3. As you jump, spread your legs to be about shoulder-width apart.
4. Stretch your arms out and over your head.
5. Jump back to the starting position. Repeat.



Activity 10 : Shuttle Run

1. Step 1: Place the cones desired distance apart (usually 10 or 20 m).
2. Step 2: Place 2 small blocks or balls at the far end cone.
3. Step 3: Start at the cone away from the blocks.
4. Step 4: Get into the sprinter position. Sprint as fast as you can to the other cone.
5. Step 5: Grab one of the blocks with your hand and immediately turn around and sprint back to the starting cone.
6. Step 6: Set the block at the starting cone and then sprint back to grab the second block.
7. Step 7: Grab the second block and turn and sprint through the starting cone.
8. Step 8: The time stops as soon as you pass the first cone for the final time.



Activity 11 : Stretching

Cat & Cow Pose

1. Start on all fours with the spine and neck in a neutral position. The back should be flat like a table top.
2. Eyes should look straight down to the ground. Inhale, drop the belly down and slowly lift the neck and head up. This is the cow half of the pose—picture a cow's swayed back with bony hips.
3. Next, on an exhale, lift the belly and spine so the back is arched like that of a cat. Eyes look towards the belly button.
4. Alternate 5 to 10 cat-cow stretches, then return to the neutral hands-and-knees position.



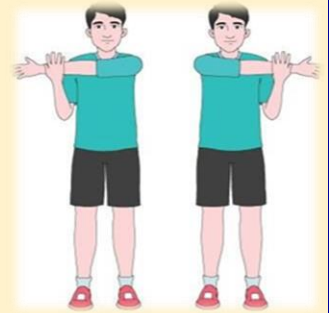
Overhead Arm Stretch

1. Stand up straight with feet together.
2. With back straight, reach arms straight up and overhead, without locking elbows.
3. Hands can be touching or apart. You can also do a very gentle back bend here. If you choose to bend backwards, keep your chin and neck lifted.



Shoulder Stretch

1. Reach the right arm straight out in front of you.
2. Bend the left arm and put the left wrist on the back of the right arm, just above the elbow.
3. Your left palm will be facing to the side.
4. Use the left arm to gently press the right arm across your body until you feel a good stretch. Hold for 10 to 30 seconds.
5. Switch arms and repeat.



Butterfly Stretch:

1. In a seated position, place the soles of the feet together and hold them with the hands.
2. The legs are now forming the butterfly "wings." Elbows can be between the legs or resting on the knees.
3. Gently press the knees down to increase the stretch.
4. To add a spine stretch, bend forward from the upper back and reach forehead toward feet.



Activity 12 : Chasing Games (Pakda Pakdi, Hide & Seek, Chain Chain, 7 Stones)

Tag Game (Pakda Pakdi):

1. One person is to touch someone else.
2. Decide who is "it." This person will chase the other players, trying to tag them, until he/she tags someone



Hide & Seek:

1. One person, the denner has to count till some number.
2. The other players will hide and just wait to be found by the denner
3. The general idea is that the person who is found by the denner is considered to be "out", that person closes his or her eyes and counts to a certain number without looking and then he or she tries to find the others.



7 Stones:

1. Children are divided into 2 teams.
2. A member of the one team tries to knock the stones with the help of a ball.
3. Once the stones are knocked down, the team must restore the stones.
4. The opposing team tries to hit the Players of the first team with the ball.
5. If the ball touches any player, that player is considered out.
6. The team tries to re build the stones while managing to not get hit by the ball from the opposing team.



Activity 13 : Relay Races (3 Legged Race, Lemon Race, Sack Race, Ball Carry)

3 Legged Race

1. Stand with your partner and face the same direction with your legs touching.
2. Tie the rope or cloth securely around the touching ankles.
3. Put your arm around your partner's waist, and have your partner do the same.
4. Put your untied leg behind the start line
5. Run in synchronization with your partner towards the finish
6. Run, keeping your legs in sync.



Lemon & Spoon

1. Mark a start and finish line.
2. Line up the kids at the start line.
3. Give each child a spoon to hold in the mouth.
4. The lemon needs to be balanced on the spoon.
5. The one to reach the finish line first without dropping the lemon/ marble WINS



Sack Race

1. Each player puts both legs into the sack and hops around a cone, or some marked point, and back, tagging the next person in line.
2. Then, the next person in line gets into the sack and repeats the once-around the cone course.
3. The first team to the finish line wins.



Ball Carry

1. Stand face to face, hold two sticks and put the ball on the sticks.
2. The two children cooperate and carry the ball to the turning point and come back.
3. When you come back to the beginning point, you give the ball to the next two children and take turns.
4. If you drop the ball, pick it up and start again from the children who dropped it.



ACTIVITIES FOR AGE 9-18 YEARS (CLASS IV TO XII) - FOCUS ON SPORTS SKILLS DEVELOPMENT

Games-related concepts are introduced to Children through modified games at the upper primary and reinforced at the secondary levels. Both fundamental and specialised skills and movement concepts are required in playing these games. In this syllabus, games are classified into the following categories:

1. Net-barrier
2. Striking-fielding
3. Territorial-invasion

Within each game category, there are games-related concepts that are transferable across games within the same category. Game-specific skills are also identified for selected games for the learning area of Physical Activities.

Apart from good balance and stability, the fitness aspects that need to be developed during this phase are:

1. Muscular Strength and Muscular Endurance
2. Speed
3. Flexibility
4. Cardio-vascular Endurance

SUGGESTED FITNESS EXERCISES FOR AGE 9-14 (CLASS 4-8)

Fit India recommends the following activities for improvement of fitness for the 9-14 age groups:

Endurance related Activities

1. **Spot Running (improves Speed & Endurance & Core Strength)**
 - a. Stand straight.
 - b. Start jogging.
 - c. Make sure to jump on toes and land on your heels.
 - d. As this is a warm-up, do this for 30 to 45 seconds.
2. **Climbing Stairs (Endurance)**
 - a. Step the right foot onto the first step, followed by the left.
 - b. Continue this stepping motion until you've reached the top of the stairs.
 - c. Always lead with the high foot.
 - d. Don't let your feet cross while climbing up the stairs.

3. **Walking on toes (Endurance)**

- a. Position the heel of one foot just in front of the toes of the other foot. Your heel and toes should touch or almost touch.
- b. Choose a spot ahead of you and focus on it to keep you steady as you walk.
- c. Take a step.
- d. Put your heel just in front of the toe of your other foot.
- e. Repeat for 20 steps.

4. **Swimming (Endurance)**

- a. Float with your face in the water, your body straight and horizontal.
- b. Stack your hands and keep your arms and legs long.
- c. Kick out and back in a circle then snap your feet together.
- d. Drop your head underwater and exhale.

5. **Jumping Jacks (Endurance)**

- a. Jump up and spread your legs apart as you swing your arms over your head.
- b. Jump again and bring your arms back to your sides and your legs together.

6. **March and Swing Your Arms (Endurance)**

- a. March on the spot.
- b. Lift your knees up as high as you can.
- c. Go at a steady pace.
- d. As you bring your knee up, swing the opposite arm in front of you.
- e. Switch your arms when you switch your legs

Strength related Activities

1. **Straight Leg Raises (Strength)**

- a. Stand tall. Use a chair or wall for balance.
- b. Forward:
 - i) Slowly lift your leg up in front of you as high as you can.
 - ii) Keep your leg straight.
 - iii) Then lower back to the starting position.
 - iv) Do not relax your leg.
 - v) Do not swing your leg.
- c. Side:
 - i) Slowly lift your leg out to the side with your toe pointed forward.
 - ii) Keep your leg straight.
 - iii) Then lower back to the starting position.
 - iv) Do not relax your leg.
 - v) Do not swing your leg.
- d. After you have completed all leg lifts on one side, switch to the other side

2. **Push Ups on the Wall (Strength)**

- a. Stand facing the wall.
- b. Place your hands flat on the wall at shoulder level.
- c. Keep your arms straight.
- d. Your feet should be behind your body so that you are leaning on the wall.
- e. Stand on the balls of your feet.
- f. Bend your arms to bring your chest to the wall.
- g. Keep your legs in place.
- h. Make your body a straight line.
- i. Push your arms straight to return to the starting position.
- j. Make sure your body stays in a straight line the whole time.

3. **Long Jump (Strength)**

Goal starts from the same point on the track and always is running at full speed when the takeoff foot hits the board.

4. **Goal Keeping (Strength)**

Goalkeeper is the last line of defense who needs to guard his goal and protect his team.

Flexibility related Activities

1. **Calf Stretch**

- a. Stand facing a wall. Put your hands against the wall at shoulder height.
- b. Put one foot in front of the other.
- c. Bend your elbows and lean in towards the wall. You will feel a stretch in your calves.
- d. Keep your knee straight and your hips forward. Make sure your heel stays on the ground. Switch your feet and repeat the stretch.

2. **Child's Pose**

- a. Kneel on the ground.
- b. Bend at your hips. Put your arms next to your head with your hands on the ground in front of you.
- c. Sit your bottom down over your heels. You should feel a stretch in your shoulders and lower back.

3. **Knee to Chest**

- a. Lie on your back with your legs straight.
- b. Bring the right knee toward your chest.
- c. Wrap your arms underneath your knee and pull your leg closer to your body until you feel a stretch in the back of your right thigh.
- d. Repeat the stretch on your left leg.

4. **Bend Down (Flexibility)**

- a. Stand tall with your feet hip-width apart, knees slightly bent, arms by your sides.
- b. Exhale as you bend forward at the hips, lowering your head toward the floor, while keeping your head, neck and shoulders relaxed.

Balance related Activities

1. **Single Leg Stance**

- a. Stand on one leg with your arms stretched out sideways
- b. Work on holding this position for 30 seconds.

Leg Swings

- a. Stand on one leg, swinging the other leg front to back.
- b. You can lightly hold onto something for help if necessary.
- c. Do 10 swings on each side.

Walking on Lines of different Shapes

- a. Find or make a straight/zigzag line on the floor.
- b. Walk on the line for 20 steps.
- c. You can put your arms out to the side for additional balance help.

SUGGESTED FITNESS ACTIVITIES FOR AGE 15-18 (CLASS 9-12)

Fit India recommends the following activities for improvement of fitness for the 15-18 age groups:

Endurance and speed related Activities

1. **800 m Race (Endurance)**

- a. Do this as a group activity with many children
- b. Try to complete a given task in the shortest amount of time.

2. **Brisk Walking (Endurance)**

- a. Walk a little initially and then gradually increase the time.
- b. Take light, easy steps and make sure your heel touches down before your toes.

3. **Quick Air Punches (Endurance)**

- a. Push off with your back foot and set foot, Quarter-rotate your jabbing shoulder as you throw the punch, fist your palm and punch.

4. **4*100/200/400 m Relay Race (Endurance & speed)**

- a. The first runner holds the baton in the right hand, the second runner will receive the baton and will run with it – in the left hand, the third will receive and carry the baton in the right hand and the final runner will handle it in the left hand.

5. **Swimming (Cardio Endurance)**

- a. Float with your face in the water, your body straight and horizontal.
- b. Stack your hands and keep your arms and legs long.
- c. Kick out and back in a circle then snap your feet together.
- d. Drop your head underwater and exhale.

6. **Walking lunges (Muscular Endurance)**

- a. Stand tall in front of a long and clear walkway.
- b. Your feet should be hip-width apart, your chest up, and your core and glutes engaged.
- c. Take a big step forwards with your left foot, lowering until both your knees are bent at 90° and your front thigh is parallel to the floor.

Strength related Activities

1. **Curl Up (core strength)**

- a. Lie on your back on the floor. Bend your hips and knees so your feet are flat on the floor. Reach your arms toward your knees.
- b. Lift your head, and then slowly lift your upper back until your hands reach your knees.
- c. Try to get your shoulder blades completely off the ground.
- d. Pause and then slowly lower all the way back down, including your head.

2. **Plank (core strength)**

- a. Assume a modified push-up position with your elbows bent 90 degrees and both forearms resting on the floor.
- b. Position your elbows directly underneath your shoulders and look straight toward the floor.
- c. Your body should form a perfectly straight line from the crown of your head to your heels

3. **Push ups (upper body strength)**

- a. Keep your feet together.
- b. Your weight should be on your chest muscles and triceps.
- c. Position hands palms-down on the floor
- d. Raise your body by using your arms

4. **Squat (lower body strength)**

- a. Plant your feet on the ground
- b. Bend your knees
- c. Lower yourself in a controlled manner.

Flexibility related Activities

1. **Forward Bend (flexibility)**

- a. Stand with your feet together, extend your torso down without rounding your back.
- b. Stay long throughout your neck, extending the crown of your head toward the ground.
- c. Draw your shoulders down your back.



GUIDELINES & SAFETY CONSIDERATIONS

1. Environmental Consideration

- a. Adequate precautionary measures related to hydration and proper clothing should be taken before undertaking physical exercises in hot humid, cold & high altitude areas.
- b. Adequate rest, quality sleep, Nutrition & Hydration status must be ensured before undertaking exercise protocol as an essential safety prerequisite.
- c. Sustained and heavy exercises are to be avoided in Hot & Humid environment.
- d. Appropriate modification should be carried out in exercise protocols keeping in view of the prevailing local environmental conditions be undertaken (extreme weather conditions).

2. Warm up

- a. Warm-up for a duration of 5-10 minutes will be an integral part of the exercise protocol.
- b. Light Stretching be undertaken as a part of the warmup phase of exercise protocol which has a role in injury prevention.

3. Hydration

- a. Appropriate measures should be undertaken during the duration of exercise to maintain adequate hydration to make up for the loss of fluid & electrolyte (water and salt) during exercise.

4. Cool Down

- a. Cooling down by undertaking light aerobic exercises & stretching of major joints for a duration of 5-10 minutes be undertaken after the end of the exercise.

5. Other Considerations

- a. Participants across the age group having a Body Mass Index (BMI) more than 30 are advised to start the exercise protocol in a gradual manner with relatively lesser time duration, lower intensity & lesser frequency and be encouraged to gradually increase the frequency, time & intensity till it is tolerated well.
- b. Children with known medical history should exercise under supervision, after due clearance from concerned Medical Practitioners.

Teachers are advised to be vigilant about the possible development / occurrence of symptoms in students with regard to adverse medical conditions and immediately stop the exercise and seek medical attention No activities should be carried out by the students unsupervised.